AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application:

Listing of Claims:

1. (**Currently Amended**) A server for improving predictive failure attributes of distributed devices, comprising:

a receiver for receiving, via a network, failure analysis data from individual ones of a plurality of distributed devices; where

each device of said plurality of distributed devices comprises failure analysis software comprising a predictive failure analysis algorithm arranged for collecting failure analysis data of said distributed device and a communications device arranged for transmitting said failure analysis data to said network;

wherein said server is arranged for analyzing said failure analysis data and for providing in response to the analysis an updated predictive failure analysis algorithm to the plurality of distributed devices , wherein each of said plurality of distributed devices is coupled to said network, wherein the updated predictive failure analysis algorithm is provided to the plurality of distributed devices in the form of a first microcode that is provided from the server to be used instead of a second microcode previously used by the plurality of distributed devices, wherein execution of the first microcode ~~and the second microcode have~~ results in the updated predictive failure analysis algorithm using different tolerances of certain error events when estimating an impending failure.

2. (Previously Presented) The server of claim 1, wherein each of said plurality of devices comprises an algorithm for managing an operation of a failure tolerant component and wherein said updated predictive failure analysis algorithm provides for improved operation of said failure tolerant component.

3. (Previously Presented) The server of claim 1, wherein said updated algorithm is transmitted to said each device via said network, wherein the network comprises the world wide web.

4. (Previously Presented) The server of claim 1, wherein said failure analysis data is used to improve at least one of design and manufacturing for future distributed devices.

5. (Previously Presented) The server of claim 1, wherein said failure analysis data provides an indication of operating lifespan of said plurality of distributed devices.

6. (Previously Presented) The server of claim 1 wherein each of said plurality of distributed devices is coupled to said network via an intermediary software agent.

7. (Previously Presented) The server of claim 6 wherein said intermediary software agent is installed on a local server.

8. (Previously Presented) The server of claim 7, wherein said local server comprises a database arranged for storing said failure analysis data, said local server being arranged for periodically uploading said failure analysis data to said server.

9. (**Currently Amended**) A device comprising:

a predictive failure analysis algorithm arranged for collecting failure analysis data of said device; and,

a communications device coupled to said predictive failure analysis algorithm arranged for transmitting said failure analysis data to a remote server via a network,

wherein said remote server is arranged for analyzing said failure analysis data received from said device and from other devices and for providing an updated predictive failure analysis algorithm

to the device and the other devices, wherein the updated predictive failure analysis algorithm is provided to the device in the form of a first microcode that is provided from the remote server to be used instead of a second microcode previously used by the device and the other devices, wherein execution of the first microcode ~~and the second microcode have~~ <u>results in the updated predictive failure analysis algorithm using</u> different tolerances of certain error events <u>when estimating an impending failure</u>.

10. (Previously Presented) The device of claim 9 wherein said device includes an algorithm for managing the operation of a failure tolerant component of said device and wherein said updated predictive failure analysis algorithm provides improved operation of said failure tolerant component.

11. (Previously Presented) The device of claim 10 wherein said updated predictive failure analysis algorithm is transmitted from the remote server to said device via said network.

12 (Previously Presented) The device of claim 9, wherein said failure analysis data is used to improve at least one of design and manufacturing for future devices.

13. (Previously Presented) The device of claim 9 wherein said updated predictive failure analysis algorithm provides an indication of operating lifespan of said device.

14. (Previously Presented) The device of claim 9 wherein said device is coupled to said network via an intermediary software agent.

15. (Original) The device of claim 14 wherein said intermediary software agent is installed on a local server.

16. (Previously Presented) The device of claim 15 wherein said local server includes a database

arranged for storing said failure analysis data from said device, said local server being arranged for periodically uploading said failure analysis data to a manufacturer's server.

17. (**Currently Amended**) A method for performing predictive data analysis using a central server, said method comprising:

collecting failure analysis data in individual ones of a plurality of distributed devices in which each of the distributed devices uses a predictive failure analysis algorithm;

receiving said failure analysis data at the central server from a network coupled to each device of said plurality of distributed devices; analyzing said failure analysis data received from said each device at the central server; and

in response to the analysis, providing an updated predictive failure analysis algorithm from the central server to the distributed devices, wherein the updated predictive failure analysis algorithm is provided to the plurality of distributed devices in the form of a first microcode that is provided from the central server to the plurality of devices to be used instead of a second microcode previously used by the plurality of devices, wherein execution of the first microcode and the second microcode have results in the updated predictive failure analysis algorithm using different tolerances of certain error events when estimating an impending failure.

18. (Canceled).

19. (Previously Presented) The method of claim 17 wherein said updated predictive failure analysis algorithm is transmitted to said device via said network.

20. (Previously Presented) The method of claim 17, wherein said updated predictive failure analysis algorithm is used to improve at least one of design and manufacturing for future devices.

21. (Previously Presented) The method of claim 17, wherein said updated predictive failure

analysis algorithm provides an indication of operating lifespan of said plurality of distributed devices.

22. (Previously Presented) The method of claim 17 wherein said each device is coupled to said network via an intermediary software agent installed on a local server.

23. (Original) The method of claim 22 wherein said intermediary software agent is installed on a local server.

24. (Previously Presented) The method of claim 23 wherein said local server includes a database arranged for storing said failure analysis data, said local server being arranged for periodically uploading said failure analysis data to a manufacturer's server.

25. (Canceled).

26. (Previously Presented) A server as in claim 1, wherein said network comprises a firewall, and where said failure analysis data is transmitted using a transmission protocol selected for being able to pass through said firewall.

27. (Previously Presented) A server as in claim 6, wherein said agent uses an interrogator.

28. (Previously Presented) A server as in claim 6, wherein said agent uses a communications path other than that used for normal input and output (I/O) operations.

29. (**Currently Amended**) A computer program comprising computer readable program code stored on a computer readable medium for performing failure analysis of a plurality of disk drives that comprise a part of at least one data storage system, comprising

first program code for collecting failure analysis data from individual ones of said disk drives and for transmitting said collected failure analysis data to a central server via a network and

second program code, executed at said central server, for analyzing said failure analysis data and deriving an updated predictive failure analysis algorithm therefrom, where said updated predictive failure analysis algorithm is downloaded to said plurality of disk drives via the network, wherein the updated predictive failure analysis algorithm is provided to the plurality of disk drives in the form of a first microcode from the central server to be used instead of a second microcode previously used by the plurality of disk drives, wherein execution of the first microcode and the second microcode have results in the updated predictive failure analysis algorithm using different tolerances of certain error events when estimating an impending failure.

30. (Canceled).

31. (Previously Presented) A computer program as in claim 29 , where said updated predictive failure analysis algorithm comprises revised disk drive operating program code.

32. (Previously Presented) A computer program as in claim 29, where said first program code is executed by a local server that comprises a part of said data storage system, and where said collected failure analysis data is locally stored in said data storage system prior to being transmitted to said central server.

33. (Previously Presented) A computer program as in claim 29, where said first program code is executed by a local server that comprises a part of said data storage system, and where said collected failure analysis data is transmitted to said central server as it is collected.

34. (**Currently Amended**) A computer program comprising computer readable program code stored on a computer readable medium for performing failure analysis of a plurality of disk drives

that comprise a part of at least one data storage system, comprising

first program code, executed by a central server, for receiving, via a network , failure analysis data from said at least one data storage system for analyzing said failure analysis data and for deriving an updated predictive failure analysis algorithm therefrom, where said updated predictive failure analysis algorithm is downloaded to said plurality of disk drives via said network, wherein the updated predictive failure analysis algorithm is provided to the plurality of disk drives in the form of a first microcode to be used instead of a second microcode previously used by the plurality of disk drives, wherein execution of the first microcode ~~and the second microcode have~~ results in the updated predictive failure analysis algorithm using different tolerances of certain error events when estimating an impending failure.

35. (Previously Presented) A computer program as in claim 34, further comprising second program code, executed by a component of said at least one data storage system, for collecting and transmitting said failure analysis data to said central server via said world wide web.

36. (Previously Presented) A computer program as in claim 34, where said updated predictive failure analysis algorithm comprises revised disk drive operating program code.

37. (Previously Presented) A computer program as in claim 35, where said second program code is executed by a local server that comprises a part of said data storage system, and where said collected failure analysis data is locally stored in said data storage system prior to being transmitted to said central server.

38. (Previously Presented) A computer program as in claim 35, where said second program code is executed by a local server that comprises a part of said data storage system, and where said collected failure analysis data is transmitted to said central server as it is collected.

39-40. (Canceled).

41. (**Currently Amended**) A system for monitoring performance of a plurality of distributed devices via a network, comprising:

a network;

a central server having a monitoring capability, the central server being coupled to the network;

a plurality of distributed devices which are coupled to the network and which are monitored by the central server via the network, each of the plurality of distributed devices having a failure data analysis capability provided by a predictive failure analysis algorithm of the corresponding distributed device, each of the plurality of distributed devices providing predictive failure data to the central server via the network, wherein the central server modifies the predictive failure analysis algorithm in the form of a first microcode based on the predictive failure data to provide an updated predictive failure analysis algorithm in the form of a second microcode previously used by the plurality of distributed devices, wherein execution of the first microcode ~~and the second microcode have~~ results in the updated predictive failure analysis algorithm using different tolerances of certain error events when estimating an impending failure.

42. (Previously Presented) A system as claimed in claim 41, wherein the updated predictive failure analysis algorithm is provided to distributed devices being manufactured.

43. (Previously Presented) A system as claimed in claim 41, wherein the updated predictive failure analysis algorithm is provided to each of the plurality of distributed devices via the network, wherein the distributed devices are data storage units.

44. (Previously Presented) A system as claim in claim 41, wherein the central server provides population statistics for distributed device ageing trends to a distributed device manufacturer for planning and budgeting considerations.